IN THE SPECIFICATION

Please replace the current abstract with the following abstract given below:

A method and apparatus for selectively expressing one or more selected fluid materials out of a fluid container, including a centrifuge rotor having a round centrifuge chamber of selected volume, a round expandable enclosure disposed within the centrifuge chamber having a rotation axis coincident with the central rotation axis and a flexible wall, a pump for controllably pumping a selected volume of expressor fluid into and out of the expandable enclosure wherein the fluid container is receivable within the centrifuge chamber, and a retaining mechanism for holding the fluid container within the centrifuge chamber in a coaxial position. The flexible wall of the fluid container is in contact with the flexible wall of the expandable enclosure.

IN THE CLAIMS:

1. (Amended) Apparatus for selectively expressing one or more selected fluid materials out of a fluid container, wherein each of the selected fluid materials has a selected density and wherein the fluid container comprises a round enclosure having a flexible wall and an exit port sealably communicating with the fluid container for enabling the selected fluid materials contained therein to be expressed out of the fluid container through the exit port, the apparatus comprising:

a centrifuge rotor having a round centrifuge chamber of selected volume and a channel provided thereon for directing an expressor fluid from a central axis toward a circumference of the rotor, wherein the centrifuge rotor being controllably rotatable around the central axis by a motor mechanism;

a round expandable enclosure disposed within the centrifuge chamber having a rotation axis coincident with the central rotation axis and a flexible wall, the fluid container having a rotation axis and being coaxially receivable within the centrifuge chamber, the expandable enclosure

being sealably connected to a source of an expressor fluid which has a density selected to be greater than the density of each of the selected one or more fluid materials disposed in the fluid container;

a pump for controllably pumping a selected volume of the expressor fluid into and out of the expandable enclosure wherein the fluid container is receivable within the centrifuge chamber;

a retaining mechanism for holding the fluid container within the centrifuge chamber in a coaxial position wherein the flexible wall of the fluid container is in contact with the flexible wall of the expandable enclosure.

12. (Amended) Apparatus for selectively expressing one or more selected fluid materials out of a fluid container, wherein each of the selected fluid materials has a selected density and wherein the fluid container comprises a round enclosure having a flexible wall and an exit port sealably communicating with the fluid container for enabling the selected fluid materials contained therein to be expressed out of the fluid container through the exit port, the apparatus comprising:

a separation housing having a round chamber of selected volume, the housing having a central axis and the round chamber including a wall having a channel positioned thereon for directing an expressor fluid from the central axis toward a circumference of the round chamber;

a round expandable enclosure disposed within the round chamber having an axis coincident with the central axis of the separation chamber and a flexible wall, the fluid container having an axis and being coaxially receivable within the round chamber, the expandable enclosure being sealably connected to a source of an expressor fluid which has a density selected to be greater than the density of each of the selected one or more fluid materials disposed in the fluid container;

a pump for controllably pumping a selected volume of the expressor fluid into and out of the expandable enclosure wherein the fluid container is receivable within the round chamber;

a retaining mechanism for holding the fluid container within the round chamber in a coaxial position wherein the flexible wall of the fluid container is in contact with the flexible wall of the expandable enclosure.

23. (Amended) Apparatus for selectively expressing one or more selected fluid materials out of a fluid container, wherein each of the selected fluid materials has a selected density and wherein the fluid container comprises a round enclosure having a rotation axis, a flexible wall and an exit port sealably communicating with the container for enabling the selected fluid materials contained therein to be expressed out of the container through the exit port, the apparatus comprising:

a centrifuge rotor having a round centrifuge chamber of selected volume and a channel provided thereon for directing an expressor fluid from a central axis toward a circumference of the rotor, wherein the centrifuge rotor being controllably rotatable around the central axis by a motor mechanism;

a flexible membrane sealably attached to a surface of the rotor such that the centrifuge chamber is divided into a first chamber for receiving the fluid container coaxially with the central rotation axis and a second round fluid sealed chamber having a rotation axis coincident with the central axis for receiving the expressor fluid;

a pump for controllably pumping a selected volume of the expressor fluid into and out of the second fluid sealed centrifuge chamber;

wherein the fluid container has a flexible wall and is receivable within the centrifuge chamber such that the flexible wall of the fluid container faces the flexible wall of the expandable enclosure;

a mechanism for filling the fluid container with any preselected variable volume of the one more selected fluid materials which is less than the selected volume of the centrifuge chamber;

a retaining mechanism for holding the fluid container completely within the centrifuge chamber upon expansion of the expandable enclosure.

34. (Amended) Apparatus for selectively expressing one or more selected fluid materials out of a fluid container, wherein each of the selected fluid materials has a selected density and wherein the fluid container comprises a round enclosure having a flexible wall and an exit port sealably communicating with the fluid container for enabling the selected fluid materials contained therein to be expressed out of the fluid container through the exit port, the apparatus comprising:

a centrifuge rotor having a round centrifuge chamber of selected volume and a channel provided thereon for directing an expressor fluid from a central axis toward a circumference of the rotor, wherein the centrifuge rotor being controllably rotatable around the central axis by a motor mechanism;

a round expandable enclosure disposed within the centrifuge chamber having a rotation axis coincident with the central rotation axis and a flexible wall, the fluid container having a rotation axis and being coaxially receivable within the centrifuge chamber, the expandable enclosure being sealably connected to a source of the expressor fluid;

a pump for controllably pumping a selected volume of the expressor fluid into and out of the expandable enclosure wherein the fluid container is receivable within the centrifuge chamber;

a heater mechanism having a control mechanism for selectively controlling the temperature of the expressor fluid;

a retaining mechanism for holding the fluid container within the first chamber in a coaxial position wherein the flexible wall of the fluid container is in contact with the flexible wall of the fluid container.

40. (Amended) Apparatus for selectively expressing one or more selected fluid materials out of a fluid container, wherein each of the selected fluid materials has a selected density and wherein the fluid container comprises a round enclosure having a rotation axis, a flexible wall and an exit port sealably communicating with the container for enabling the selected fluid materials contained therein to be expressed out of the container through the exit port, the apparatus comprising:

a centrifuge rotor having a round centrifuge chamber of selected volume and a channel provided thereon for directing an expressor fluid from a central axis toward a circumference of the rotor, wherein the centrifuge rotor being controllably rotatable around the central axis by a motor mechanism;

a flexible membrane sealably attached to a surface of the rotor such that the centrifuge chamber is divided into a first chamber for receiving the fluid container coaxially with the central rotation axis and a second round fluid sealed chamber having a rotation axis coincident with the central axis for receiving an expressor fluid;

a pump for controllably pumping a selected volume of the expressor fluid into and out of the second fluid sealed centrifuge chamber;

a heater mechanism having a control mechanism for selectively controlling the temperature of the expressor fluid;

a retaining mechanism for holding the container within the first chamber in a position wherein the flexible wall of the container is in contact with an outside surface of the flexible membrane.

48. (Amended) The apparatus of claim 1 further comprising a temperature controller and a temperature sensor [connected to a program], wherein the temperature sensor produces a signal indicative of a temperature of the fluid container which is received by the temperature controller, and wherein the temperature controller controls a temperature of the fluid container based on the signal.